UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/998,046	11/29/2001	Timothy Alan Dietz	AUS920010922US1	6049
25299 7590 01/08/2007 IBM CORPORATION PO BOX 12195 DEPT YXSA, BLDG 002 RESEARCH TRIANGLE PARK, NC 27709			EXAMINER	
			SHRESTHA, BIJENDRA K	
			ART UNIT	PAPER NUMBER
			3691	
SHORTENED STATUTORY	Y PERIOD OF RESPONSE	MAIL DATE	· DELIVĖR'	Y MODE
3 MON	NTHS	01/08/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	Application No.	Applicant(s)				
	09/998,046	DIETZ ET AL.				
Office Action Summary	Examiner	Art Unit				
	Bijendra K. Shrestha	3691				
The MAILING DATE of this communication app	ears on the cover sheet with the c	orrespondence address				
Period for Reply	•					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period w  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim rill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
	<del>-</del>					
•—						
·	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
	x parte Quayle, 1555 C.D. 11, 40					
Disposition of Claims						
4) Claim(s) 1-30 is/are pending in the application.						
4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	•	•				
6)⊠ Claim(s) <u>1-30</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.					
Application Papers						
9) The specification is objected to by the Examiner.						
10)⊠ The drawing(s) filed on <u>29 November 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
		7.00.01. 01.70.11.7. 7.0.2.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) ☐ All b) ☐ Some * c) ☐ None of:						
<ol> <li>Certified copies of the priority documents</li> </ol>	1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
•						
Attachment(s)						
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date						
3) Information Disclosure Statement(s) (PTO/SB/08)  5) Notice of Informal Patent Application						
Paper No(s)/Mail Date 6) Other:						

Art Unit: 3691

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 11-20 are rejected under 35 U.S.C. 101 because the claimed method for generating quality assurance requirements for software suppliers does not recite a limitation in the technological arts. The independently claimed steps of: "assessing the quality levels; and generating quality attributes" are abstract ideas which can be performed mentally without interaction of a physical structure. However, the claimed invention must utilize technology in a non-trivial manner (Ex parte Bowman, 6 1 USPQ2d 1665, 1671 (Bd. Pat. App. & Inter. 2001)).

Because the independently claimed invention is directed to an abstract idea which does not recite a limitation in the technological arts, those claims and claims depending from them, are not permitted under 35 USC 101 as being related to statutory subject matter. However, in order to consider those claims in light of the prior art, examiner will assume that those claims recite statutorily permitted subject matter.

## Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

Art Unit: 3691

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- 4. Claims 1-7, 9-17, 19-27, 29 and 30 are rejected under 35 U.S.C. 102(b) as being unpatentable by Aycock et al., U.S. Patent No. 5,765,138 (reference A in attached PTO-892).
- 5. As per claim 1, Aycock et al. teach a computer controlled display system for generating quality assurance contract requirements for software suppliers comprising:

means for assessing the quality level of each of a set of quality attributes of said software suppliers (see Fig. 1; column 6, lines 1-5; where quality level of each of set of quality attributes of software supplier specified in Request for Proposal/Request for Quotation (RFP/RFQ) assessed with help of selected set of supplier quality process maturity requirement established in Step 12); and

means for generating for each of said quality attributes at least one contract requirement for said supplier based upon the quality level of said attribute (see Fig. 1; column 3, lines 15-18; where requirement for supplier site evaluation is generated in tier 2 after calculating supplier maturity level in tier 1).

6. As per claim 2, Aycock et al. teach claim 1 as described above. Aycock et al. further teach the computer controlled display system, wherein:

said means for assessing the quality level includes means for determining one of a plurality of quality levels for each of said set of quality attributes (see Fig. 1, steps 18-20; column 6, lines 37-54); and

Art Unit: 3691

said means for generating includes means for generating a different contract requirement for each of said quality levels for each attribute (see Fig. 1, steps 42; column, lines 1-10; where different supplier quality process maturity requirements are selected based on supplier response to RFP/RFQ in order to validate and identify detailed quality control procedure used by the supplier).

7. As per claim 3, Aycock et al. teach claim 2 as described above. Aycock et al. further teach the computer controlled display system, wherein

no contract requirement is generated for at least one of said quality levels for at least one of said quality attributes (see Fig. 1; column 7, lines 46-54; where if a supplier is a regular and established vendor of other projects with excellent historical vendor performance and meets minimum maturity level, then the supplier may be automatically approved without requiring to go through tier 2).

8. As per claim 4, Aycock et al. teach claim 2 as described above. Aycock et al. further teach the computer controlled display system, wherein

said means for determining said quality levels determines said levels dynamically during the system operation (see Fig. 2; abstract; where display system providing interactive evaluation of supplier provide real-time recalculation and updates of quality levels of the supplier).

9. As per claim 5, Aycock et al. teach claim 2 as described above. Aycock et al. further teach the computer controlled display system, wherein:

said set of quality attributes consists of a single overall quality characteristic having several predetermined quality levels (see column 6, lines 37-54; column 7, lines

Art Unit: 3691

37-45: where overall maturity level is calculated at step 26 such as level 2 for repeatable process, level 3 for standardized process); and

said means for generating provides a plurality of contract requirements for each of said predetermined quality levels (see Fig. 1, step 42 and 44; column 7, lines 37-45; column 1-11; where relevant supplier quality process maturity requirement are selected based on maturity levels calculated at step 26).

10. As per claim 6, Aycock et al. teach claim 1 as described above. Aycock et al. further teach the computer controlled display system, wherein:

said contract requirement involves tracking and reporting of said software development (see Fig. 1, step 46; column 8, lines 21-27; where on-site evaluation of supplier is performed by design, quality control, production control manager and engineers from the purchasing side; Examiner interprets these evaluation involves tracking and development of products (software)).

11. As per claim 7, Aycock et al. teach claim 1 as described above. Aycock et al. further teach the computer controlled display system, wherein:

said contract requirement involves tracking and reporting of testing of said software (see Fig. 1, step 46; column 27-46).

12. As per claim 9, Aycock et al. teach claim 1 as described above. Aycock et al. further teach the computer controlled display system, wherein:

said contract requirement involves the management processes of said supplier (see column 8, lines 26-31; where on-site review of supplier include review of quality

Art Unit: 3691

control processes and procedure, and site evaluation by production engineers and production control managers responsible for production scheduling).

13. As per claim 10, Aycock et al. teach claim 1 as described above. Aycock et al. further teach the computer controlled display system, wherein:

said display system assigns said software supply function to said software supplier in an overall work flow distribution system (see Fig 2; column 11, lines 2-4; where the display system assigns the supplier to respond to RFP/RFQ).

said means for generating automatically generate and distribute said contract requirements to said supplier in response to the selection of said supplier (see Fig. 1, step 32, 34 and 36; column 7, lines 59-65; where an additional tier 2 analysis requirement is established for a supplier automatically, if automatic approval of supplier cannot be made based on score in maturity requirement calculation).

14. As per claim 11, Aycock et al. teach a method for generating, on a user interactive computer controlled display system, quality assurance contract requirements for software suppliers comprising:

assessing the quality level of each of a set of quality attributes of said software supplier (see Fig. 1; column 6, lines 1-5; where quality level of each of set of quality attributes of software supplier specified in Request for Proposal/Request for Quotation (RFP/RFQ) assessed with help of selected set of supplier quality process maturity requirement established in Step 12); and

generating for each of said quality attributes at least one contract requirement for said supplier based upon the quality level of said attribute (see Fig. 1; column 3, lines 15-18; where requirement for supplier site evaluation is generated in tier 2 after calculating supplier maturity level in tier 1).

15. As per claim 12, Aycock et al. teach claim 11 as described above. Aycock et al. further teach the method, wherein:

said step of assessing the quality level includes determining one of a plurality of quality levels for each of said set of quality attributes (see Fig. 1, steps 18-20; column 6, lines 37-54); and

generating a different contract requirement for each of said quality levels for each attribute (see Fig. 1, steps 42; column, lines 1-10; where different supplier quality process maturity requirements are selected based on supplier response to RFP/RFQ in order to validate and identify detailed quality control procedure used by the supplier).

16. As per claim 13, Aycock et al. teach claim 12 as described above. Aycock et al. further teach the method, wherein:

no contract requirement is generated for at least one of said quality levels for at least one of said quality attributes (see Fig. 1; column 7, lines 46-54; where if a supplier is a regular and established vendor of other projects with excellent historical vendor performance and meets minimum maturity level, then the supplier may be automatically approved without requiring to go through tier 2).

17. As per claim 14, Aycock et al. teach claim 12 as described above. Aycock et al. further teach the method, wherein:

said step of assessing said quality levels determines said levels dynamically during the system operation (see Fig. 2; abstract; where display system providing interactive evaluation of supplier provide real-time recalculation and updates of quality levels of the supplier).

18. As per claim 15, Aycock et al. teach claim 12 as described above. Aycock et al. further teach the method, wherein:

said set of quality attributes consists of a single overall quality characteristic having several predetermined quality levels (see column 6, lines 37-54; column 7, lines 37-45: where overall maturity level is calculated at step 26 such as level 2 for repeatable process, level 3 for standardized process); and

a plurality of contract requirements for each of said predetermined quality levels is generated (see Fig. 1, step 42 and 44; column 7, lines 37-45; column 1-11; where relevant supplier quality process maturity requirement are selected based on maturity levels calculated at step 26).

19. As per claim 16, Aycock et al. teach claim 11 as described above. Aycock et al. further teach the method, wherein:

said contract requirement involves tracking and reporting of said software development (see Fig. 1, step 46; column 8, lines 21-27; where on-site evaluation of supplier is performed by design, quality control, production control manager and engineers from the purchasing side; Examiner interprets these evaluation involves tracking and development of products (software)).

Art Unit: 3691

20. As per claim 17, Aycock et al. teach claim 11 as described above. Aycock et al. further teach the method, wherein:

said contract requirement involves tracking and reporting of testing of said software (see Fig. 1, step 46; column 27-46).

21. As per claim 19, Aycock et al. teach claim 11 as described above. Aycock et al. further teach the method, wherein:

said contract requirement involves the management processes of said supplier (see column 8, lines 26-31; where on-site review of supplier include review of quality control processes and procedure, and site evaluation by production engineers and production control managers responsible for production scheduling).

22. As per claim 20, Aycock et al. teach claim 11 as described above. Aycock et al. further teach the method, wherein:

said software supply function is assigned to said software supplier in an overall work flow distribution method (see Fig 2; column 11, lines 2-4; where the display system assigns the supplier to respond to RFP/RFQ); and

said contract requirements are automatically generated and distributed to said supplier in response to the selection of said supplier (see Fig. 1, step 32, 34 and 36; column 7, lines 59-65; where an additional tier 2 analysis requirement is established for a supplier automatically, if automatic approval of the supplier cannot be made based on score in maturity requirement calculation).

23. As per Claim 21, Aycock et al. teach a computer program having program code included on a computer readable medium operable in a computer controlled display system for generating quality assurance contract requirements for software suppliers comprising:

means for assessing the quality level of each of a set of quality attributes of said software supplier (see Fig. 1; column 6, lines 1-5; where quality level of each of set of quality attributes of software supplier specified in Request for Proposal/Request for Quotation (RFP/RFQ) assessed with help of selected set of supplier quality process maturity requirement established in Step 12); and

means for generating for each of said quality attributes at least one contract requirement for said supplier based upon the quality level of said attribute (see Fig. 1; column 3, lines 15-18; where requirement for supplier site evaluation is generated in tier 2 after calculating supplier maturity level in tier 1).

24. As per claim 22, Aycock et al. teach claim 21 as described above. Aycock et al. further teach the computer program, wherein:

said means for assessing the quality level includes means for determining one of a plurality of quality levels for each of said set of quality attributes (see Fig. 1, steps 18-20; column 6, lines 37-54); and

said means for generating includes means for generating a different contract requirement for each of said assessed quality levels for each attribute (see Fig. 1, steps 42; column, lines 1-10; where different supplier quality process maturity requirements

Art Unit: 3691

are selected based on supplier response to RFP/RFQ in order to validate and identify detailed quality control procedure used by the supplier).

25. As per claim 23, Aycock et al. teach claim 22 as described above. Aycock et al. further teach the computer program, wherein:

no contract requirement is generated for at least one of said quality levels for at least one of said quality attributes (see Fig. 1; column 7, lines 46-54; where if a supplier is a regular and established vendor of other projects with excellent historical vendor performance and meets minimum maturity level, then the supplier may be automatically approved without requiring to go through tier 2).

26. As per claim 24, Aycock et al. teach claim 22 as described above. Aycock et al. further teach the computer program, wherein:

said mean for assessing said quality levels determines said levels dynamically during the system operation (see Fig. 2; abstract; where display system providing interactive evaluation of supplier provide real-time recalculation and updates of quality levels of the supplier).

27. As per claim 25, Aycock et al. teach claim 22 as described above. Aycock et al. further teach the computer program, wherein:

said set of quality attributes consists of a single overall quality characteristic having several predetermined quality levels (see column 6, lines 37-54; column 7, lines 37-45: where overall maturity level is calculated at step 26 such as level 2 for repeatable process, level 3 for standardized process); and

Art Unit: 3691

said means for generating provides a plurality of contract requirements for each of said predetermined quality levels (see Fig. 1, step 42 and 44; column 7, lines 37-45; column 1-11; where relevant supplier quality process maturity requirement are selected based on maturity levels calculated at step 26).

28. As per claim 26, Aycock et al. teach claim 21 as described above. Aycock et al. further teach the computer program, wherein:

said contract requirement involves tracking and reporting of said software development (see Fig. 1, step 46; column 8, lines 21-27; where on-site evaluation of supplier is performed by design, quality control, production control manager and engineers from the purchasing side; Examiner interprets these evaluation involves tracking and development of products (software)).

29. As per claim 27, Aycock et al. teach claim 21 as described above. Aycock et al. further teach the computer program, wherein:

said contract requirement involves tracking and reporting of testing of said software (see Fig. 1, step 46; column 27-46).

30. As per claim 29, Aycock et al. teach claim 21 as described above. Aycock et al. further teach the computer program, wherein:

said contract requirement involves the management processes of said supplier (see column 8, lines 26-31; where on-site review of supplier include review of quality control processes and procedure, and site evaluation by production engineers and production control managers responsible for production scheduling).

Art Unit: 3691

31. As per claim 30, Aycock et al. teach claim 21 as described above. Aycock et al. further teach the computer program, wherein:

said display system assigns said software supply function to said software supplier in an overall work flow distribution system (see Fig 2; column 11, lines 2-4; where the display system assigns the supplier to respond to RFP/RFQ); and said means for generating automatically generate and 6 distribute said contract requirements to said supplier in response to the selection of said supplier (see Fig. 1, step 32, 34 and 36; column 7, lines 59-65; where an additional tier 2 analysis requirement is established for a supplier automatically, if automatic approval of the supplier cannot be made based on score in maturity requirement calculation).

## Claim Rejections - 35 USC § 103

- 32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 33. Claim 8, 18 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aycock et al., U.S. Patent No. 5,765,138(reference A in attached PTO-892) in view of Gloor et al., U.S. Patent No. 6,859,781 (reference B in attached PTO-892).
- 34. As per claim 8, Aycock et al. teach claim 1 as described above.

Aycock et al. do not teach the computer controlled display system, wherein said contract requirement involves software supplier risk identification and reduction.

Art Unit: 3691

Gloor et al. teach the computer controlled display system, wherein:

said contract requirement involves software supplier risk identification and reduction (see Figure, steps 14, 16 and 24; column 3, lines 14,15, 24, 49; where review process includes technical risk identification with appropriate assessment and containment plan).

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time the invention was made to allow contract requirement that involves software supplier risk identification and reduction of Aycock et al. because Gloor et al. teach that allowing contract requirement that involves software supplier risk identification and reduction would assure quality of a service solution (Gloor et al., column 1, lines 59-60).

35. As per claim 18, Aycock et al. teach claim 11 as described above.

Aycock et al. <u>do not teach the method, wherein said contract requirement</u> involves software supplier risk identification and reduction.

Gloor et al. teach the method, wherein:

said contract requirement involves software supplier risk identification and reduction (see Figure, steps 14, 16 and 24; column 3, lines 14,15, 24, 49; where review process includes technical risk identification with appropriate assessment and containment plan).

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time the invention was made to allow contract requirement that involves software supplier risk identification and reduction of Aycock et al. because Gloor et al. teach that

Art Unit: 3691

allowing contract requirement that involves software supplier risk identification and reduction would assure quality of a service solution (Gloor et al., column 1, lines 59-60).

36. As per claim 28, Aycock et al. teach claim 21 as described above.

Aycock et al. do not teach the computer program, wherein said contract requirement involves software supplier risk identification and reduction.

Gloor et al. teach the computer program, wherein:

said contract requirement involves software supplier risk identification and reduction (see Figure, steps 14, 16 and 24; column 3, lines 14,15, 24, 49; where review process includes technical risk identification with appropriate assessment and containment plan).

Therefore, it would be prima facie obvious to one of ordinary skill in the art at the time the invention was made to allow contract requirement that involves software supplier risk identification and reduction of Aycock et al. because Gloor et al. teach that allowing contract requirement that involves software supplier risk identification and reduction would assure quality of a service solution (Gloor et al., column 1, lines 59-60).

37. The prior art made of record and not relied upon is considered pertinent to applicant's disclosures. The following are pertinent to current invention, though not relied upon:

Armstrong et al. (U.S. Patent No. 5,627,973) teach method and apparatus for evaluating business opportunities for supplying goods and services.

Art Unit: 3691

Guinta et al. (U.S. Patent No. 6,161,101) teach method and apparatus for computer-aided assessment of organization process or system.

Hoyt et al. (U.S. Patent No. 6,067,531) teach automated contract negotiator/generator system and method.

Kansal (U.S. Patent No. 6,647,374) teaches system and method for assessing and rating vendor risk and pricing of technology delivery insurance.

Keane (U.S. Patent No. 5,737,581) teaches quality system implementation simulator.

Miyakawa et al. (U.S. Patent No. 5,717,598) teach automatic manufacturability evaluation method and system.

Shepherd (U.S. Patent No. 6,134,536) teaches method and apparatus relating to the formulation and trading of risk management contracts.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bijendra K. Shrestha whose telephone number is (571)270-1374. The examiner can normally be reached on Monday - Friday, 7:30 a.m - 5 p.m, 2nd Friday OFF.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Nolan can be reached on (571)270-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3691

Page 17

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**BKS** 

MATTHEW S. GART
PRIMARY EXAMINER
FECHNOLOGY CENTER 3600